

## CLAIMS

What is claimed is:

- 5 1. A method of virtual private networking, comprising:
- receiving a request from at least one user for at least  
one address that can be translated by a second DNS server;  
detecting that the at least one address cannot be  
translated by a first DNS server, wherein the first DNS server  
is then in use by the user;
- 10 redirecting the request from the first DNS server to a  
gateway, wherein the gateway directs the request to the second  
DNS server, and wherein the second DNS server resolves the  
request and returns the address to the gateway; and
- 15 receiving, from the gateway, the requested address  
formatted according to the first DNS server.
2. The method of claim 1, wherein the first DNS server is a  
dial-in server for an ISP.
- 20 3. The method of claim 1, wherein said receiving a user  
request comprises receiving a user request over at least one  
communication media selected from the group consisting of a  
modem, a cable modem, and a DSL.
- 25 4. The method of claim 1, wherein the first DNS server is a

familiar server associated with a dial-in service.

5. The method of claim 1, wherein the first DNS server is an unfamiliar server associated with a dial-in service.

5

6. The method of claim 1, further comprising installing a client, wherein the client performs said receiving a request from a user, detecting, and receiving the requested address.

7. The method of claim 1, wherein the user request received is for an internal address.

8. The method of claim 7, wherein said detecting comprises:  
attempting to obtain a resolution of the requested address  
by the first DNS server;  
failing to receive a resolution from the first DNS server.

9. The method of claim 8, wherein the first DNS server is an external DNS server.

10. The method of claim 9, wherein said detecting further comprises activating a switch, wherein the switch, when inactive, points to the first DNS server, and, when active, points to the gateway.

11. The method of claim 1, wherein said redirecting comprises:

translating a first address of the first DNS server to a second address of the gateway, wherein the gateway redirects the request to the second DNS server.

12. The method of claim 11, wherein said translating comprises overriding the first address of the first DNS server.

13. The method of claim 12, wherein said redirecting further comprises encrypting communication to the gateway.

14. The method of claim 13, wherein the gateway unencrypts the communication prior to directing the communication to the second DNS server.

15. The method of claim 1, further comprising receiving at least one security check before said redirecting to the gateway.

16. A redirector that redirects a domain name service inquiry from a domain name server that cannot resolve the inquiry to a domain name service server that can resolve the inquiry, comprising:

a client;

at least one switch on said client;

pathPHLLIB #403544v3 FINAL TJMCWILL

a gateway communicatively connected to said client;

wherein said switch receives at least one domain name service inquiry directed to a first domain name server from said client; and

5 wherein, upon activation of said at least one switch, said switch redirects the at least one domain name service inquiry to at least one second domain name server through said gateway, which at least one second domain name server returns to said gateway a resolution of the at least one domain name service inquiry.

10 17. The redirector of claim 16, wherein, the redirect of the at least one domain name service inquiry through said gateway comprises an encrypted communication.

15 18. The redirector of claim 16, wherein said switch comprises an override.

20 19. The redirector of claim 18, wherein said override is activated by the user.

25 20. The redirector of claim 18, wherein said override is activated only when the first domain name server cannot resolve the at least one domain name service inquiry.

21. The redirector of claim 18, wherein said override

pathPHLLIB #403544v3 FINAL TJMCWILL

overrides all domain name service inquiries upon activation.

22. The redirector of claim 16, further comprising a destination, wherein the resolution includes the destination, and wherein said at least one second domain name server returns to said gateway information from the destination.

23. The redirector of claim 16, wherein said gateway comprises an address overwriter that changes a destination address on the at least one domain name service inquiry from the first domain name server to the second domain name server.

24. The redirector of claim 23, wherein said gateway further returns the resolution to said client, and wherein said address overwriter overwrites a second address of the second domain name server with a first address of the first domain name server within the resolution for return to said client.

25. The redirector of claim 16, wherein the communicative connection comprises an ISP connection, and wherein the communicative connection comprises an encrypted connection.

26. The redirector of claim 16, wherein said client comprises a VPN client, and wherein said gateway comprises a VPN gateway, and wherein said switch comprises software code resident on said VPN client.

pathPHLLIB #403544v3 FINAL TJMCWILL

27. The redirector of claim 26, wherein said VPN client comprises software resident on at least one computer.

5 28. A virtual private network using domain name service proxy that redirects a domain name service inquiry from a first domain name server that cannot resolve the inquiry to a second domain name service server that can resolve the inquiry, comprising:

10 a user computer in communicative connection with a VPN client;

at least one switch within said VPN client;

15 a VPN gateway communicatively connected to said VPN client;

wherein said switch receives at least one domain name service inquiry directed to the first domain name server from said VPN client;

20 wherein, upon activation of said at least one switch, said switch redirects the at least one domain name service inquiry away from the first domain name server to the second domain name server through said gateway, by sending at least one encrypted payload including therein the at least one domain name service inquiry to said gateway, which gateway then unencrypts the payload and sends the payload to the second  
25 domain name server; and

wherein the second domain name server returns to said

gateway a resolution of the at least one domain name service inquiry, wherein the resolution includes therein information from a destination address for the at least one domain name service inquiry; and

5            wherein said gateway encrypts the information and returns the information to said VPN client.

29.        A virtual private network, comprising:

10           means for receiving a request from at least one user for at least one address that can be translated by a second DNS server;

          means for detecting that the at least one address cannot be translated by a first DNS server, wherein the first DNS server is then in use by the user;

15           means for redirecting the request from the first DNS server to a gateway, wherein the gateway directs the request to the second DNS server, and wherein the second DNS server resolves the request and returns the address to the gateway; and

20           means for receiving, from the gateway, the requested address formatted according to the first DNS server.